

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	
David J. Corisis et al.	§	Group Art Unit: 2835
	§	
Serial No.: 09/152,659	§	Confirmation No.: 9522
	§	
Filed: September 14, 1998	§	Examiner: Chervinsky, Boris Leo
	§	
For: Integrated Circuit Package Support	§	Atty. Docket:
System	§	MICS:0180-2/FLE/MAN/TOM
	§	97-0553.02

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November 26, 2008 Date	/Robert A. Manware/ Robert A. Manware

**REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41**

Appellants submit this Reply Brief pursuant to 37 C.F.R. § 41.41 and in response to the Examiner's Answer mailed on August 5, 2008. Specifically, this Reply Brief highlights the underlying deficiencies of the contentions made by the Examiner in the Examiner's Answer with respect to the Chiu, U.S. Patent no. 5,239,199 (hereinafter "Chiu"), in view of Jeffries et al., U.S. Patent No. 5,815,371 (hereinafter "Jeffries"), alternatively in view of either Edfors, U.S. Patent No. 5,050,039 (hereinafter "Edfors"), or Russell et al., U.S. Patent No. 5,432,678 (hereinafter "Russell. Accordingly, in view of Appellants' attempt to avoid repetition in this Reply, Appellants respectfully request that the Board consider the following remarks in addition to the complete arguments set forth in the Appeal Brief filed on July 16, 2008.

*There is no suggestion to combine the references*

In the Reply Brief, the Examiner stated:

In response to Appellant's argument 1 (one) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so...[i]n this case, the prior art clearly disclose all claimed elements and the motivation to combine is to provide better stability."

Reply Brief, page 6.

As preliminary matter, Appellants stress that they are not solely relying on a lack of suggestion to combine to argue that the combination is proper. As argued in the Appeal Brief filed on July 16, 2008, Appellants assert that: 1) Chiu teaches away from combination with Jeffries, Edfors, and Russell; 2) the obviousness determination does not have any "rational underpinning to support a conclusion of obviousness." M.P.E.P. §2142; and 3) the "proposed modification" necessary for the obviousness conclusion makes the prior art (Chiu) "unsatisfactory for its intended purpose." M.P.E.P. §2143.01.

The Examiner stated that the "motivation to combine is to provide better stability." Reply Brief, page 6. Appellants assert that this motivation is insufficient to overcome the deficiencies of the combination listed above. Specifically, as argued in the Appeal Brief filed on July 16, 2008, Chiu discloses a fixture that is designed to be unsecured to a surface so that devices may be removed and inserted into the fixture during "testing and burn-in," providing "easy repair and replacement of devices." Chiu, col. 3, lines 63-64. In contrast, the cited secondary references Jeffries, Edfors, and Russell each recite a fixture or support that is secured to a surface or printed circuit board. Further, the devices disclosed in the secondary references Jeffries, Edfors, and Russell are clearly used for a different purpose than the support disclosed in Chiu. Those

devices in Jeffries, Edfors, and Russell are not used during “testing and burn-in” of devices, and, thus, are in contrast with the purpose of Chiu to provide an unsecured and removable fixture 31 to allow repair and replacement of devices 10. In light of these differences, Appellants maintain that the cited combination of Chiu with Jeffries, Edfors, and Russell is improper.

***The cited combination does not disclose” at least one rail coupled to the surface, wherein the rail extends along the sides of the plurality of integrated circuit packages” as recited by independent claim 68.***

In the Reply Brief, the Examiner stated that Appellants’ argument is “not considered as valid since these elements are interpreted in reasonably broad meaning of the terms used in claims.” Reply Brief, page 6. Further, the Examiner stated:

the upper portion of the element 31 is interpreted as the rail and it is extending along the sides of the plurality of integrated circuit packages 10, and it happens to be top sides, but claim does not specify the orientation of the sides therefore it is interpreted in its broad meaning.

*Id.*, page 6.

Appellants maintain that Chiu does not disclose “at least one rail coupled to the surface, wherein the rail extends along the sides of the plurality of integrated circuit packages” as recited by claim 68. Appellants assert that claim elements “rail” and “extends along the sides” should be interpreted according to their “plain meaning,” e.g., the ordinary and customary meaning given to the term by those of ordinary skill in the art, and should also be given their “broadest reasonable interpretation consistent with the specification.” M.P.E.P. §§ 2111 and 2111.01. In light of Appellants’ specification, and the plain meaning of the term “rail,” the heat sink/fixture 31 of Chiu is clearly different than a rail. For example, as stated in the specification, the rails “engage the opposed side edges 20 of each package 12.” Application, page 5, lines. 15-16; Fig. 2. Additionally, because Chiu does not disclose a “rail,” Chiu cannot disclose a “rail” that extends “along the sides of the plurality of integrated circuit packages” as also recited by claim 68.

Accordingly, Appellants maintain that Chiu does not disclose “at least one rail coupled to the surface, wherein the rail extends along the sides of the plurality of integrated circuit packages” as recited by claim 68

***The cited combination fails to disclose “a cross piece coupled to the surface and extending over the plurality of integrated circuit packages in a direction transverse to the plurality of integrated circuit packages” as recited by independent claim 71.***

In the Reply Brief, the Examiner stated:

Appellant’s argument 3(three) regarding claim 71...is not considered as valid since the top portion of element 31 is considered by the examiner as the cross piece that extending over the plurality of integrated circuit packages 10 in the direction transverse to integrated packages 10 and is coupled to the surface of the element 32 by the plurality of supports or posts (side portions of element 31) extending perpendicularly from the cross piece.

Reply Brief, pages 6-7.

Appellants maintain that element 31 of Chiu does not disclose a “cross piece” as recited by claim 71. Appellants assert that fixture 31 of Chiu does not disclose the claim element “cross piece” of claim 71 as interpreted according to its “plain meaning,” e.g., the ordinary and customary meaning given to the term by those of ordinary skill in the art, and the “broadest reasonable interpretation consistent with the specification.” M.P.E.P. §§ 2111 and 2111.01. Appellants note that, as illustrated in the Application, the “cross piece” of claim 71 extends transversely over the packages 12 and “engages the top edges of the packages 12.” Application, page 5, lines 29-31. The fixture 31 of Chiu engages each heat sink 16 of the devices 10 in a direction parallel to the devices 10. Chiu, col. 2, lines 49-53. Slots 31b of Chiu, for example, engage the heat sinks 16 in a direction parallel to the heat sinks 16 and devices 10. *Id.*, Fig. 10. Thus, Appellants assert that the fixture 31 is not a “cross piece” as recited by claim 71.

***The cited combination is improper because Chiu teaches a removable support structure for testing and burn-in functions that teaches away from combination with Jeffries, Edfors, or Russell***

In the Reply Brief, the Examiner stated that “[a]s stated above for argument 1 (one), it is clearly suggested by all prior art, that the support can be secured to the surface as to achieve better stability of the structure.” Reply Brief, page 7.

Appellants assert that the Examiner’s conclusion for the cited combination is unsupported by Chiu. As stated in Chiu and as previously acknowledged by the Examiner, the fixture/heat sink disclosed in Chiu “may be sprung open for securing the heat sink of each device...[e]ach leg 31c and 31d moves, for example for “a” to “b” when the legs are pulled apart.” Chiu, col. 3, lines 22. This function of Chiu is to provide “easy repair and replacement of devices” in the fixture/heat sink of Chiu. *Id.* col. 3, lines 63-64. Appellants maintain that, even if securing the support of Chiu to a surface provided better stability as suggested by the Examiner, such a “proposed modification” necessary for the obviousness conclusion makes the prior art (Chiu) “unsatisfactory for its intended purpose.” M.P.E.P. §2143.01. If the support of Chiu was secured to a surface, the invention disclosed in Chiu would be unable to be opened to allow removal of devices during testing and burn-in. This “proposed modification” renders Chiu unsuitable for its intended purpose of providing “easy repair and replacement of devices” in the fixture/heat sink. Accordingly, Appellants maintain that the cited combination of Chiu with the secondary references Jeffries, Edfors, and Russell is improper.

**Conclusion**

In conclusion, Appellants reiterate that the Examiner has failed to establish a *prima facie* case of obviousness with regard to the claims 33-38, 41, 42, 68, 69, 70, and 71-73 based upon the combination of Chiu in view of Jeffries, Edfors, or Russell. Therefore, for at least the reasons set forth above, as well as the complete arguments set forth in the previously filed Appeal Brief, Appellants respectfully submit to the Board that claims 33-38, 41, 42, 68, 69, 70, and 71-73 are allowable over the cited references. As such, Appellants respectfully request that the Board direct the Examiner to reverse the rejections under 35 U.S.C. § 103(a) of claims 33-38, 41, 42, 68, 69, 70, and 71-73.

Respectfully submitted,

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